

TOBACCO CONTROL

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Editorials

Legislation to reduce worksite exposure to environmental tobacco smoke

Evidence for the health consequence of exposure to environmental tobacco smoke (ETS) has been accumulating. In 1986, the National Research Council established a committee to examine the potential health consequences of exposure to ETS.¹ They reported that "considering the evidence as a whole, exposure to ETS increases the incidence of lung cancer in nonsmokers." The 1986 US Surgeon General's Report concluded from the available evidence that ETS exposure is a cause of lung cancer.² In 1991, the National Institute for Occupational Safety and Health³ established that ETS met the criteria of the Occupational Safety and Health Administration for classification as a potential occupational carcinogen. In 1993, the Environmental Protection Agency (EPA)⁴ labelled ETS a Group A carcinogen, on a par with asbestos and benzene. The EPA estimates that 3000 lung cancer deaths per year are the result of ETS exposure.

This documentation has provided substantial cause for the growing prevalence of worksite tobacco control policies. In 1992, 59 % of worksites employing more than 50 persons had a formal smoking policy which either banned smoking, or restricted smoking to separately ventilated work areas.⁵ This represents a substantial increase since 1985, when only 27 % of the worksites reported such policies. States and local municipalities increasingly are adopting ordinances requiring worksites to restrict smoking. As of 1989, laws in 14 states and 297 communities required such restrictions.⁶ Such laws are on the increase.

This issue of *Tobacco Control* includes one of the first articles documenting the salubrious impact of such ordinances on non-smoker exposure to ETS. In their article entitled, "Do smoking ordinances protect non-smokers from environmental tobacco smoke at work?",⁷ Pierce and his colleagues analyse the results of surveys of employed residents of communities with no ordinances, weak ordinances, and strong ordinances requiring worksite smoking policies. They found that respondents employed in communities where strong ordinances exist were more likely to work in settings that ban smoking, and were exposed to significantly lower levels of ETS at work.

Worksites are a primary source of ETS exposure, particularly for non-smokers who do not live with a smoker.^{8,9} Emmons reported that over 75 % of the employed non-smokers they surveyed reported exposure to ETS at work.⁹ Despite such high exposure rates, one population-based survey found that 88 % of non-smokers were unaware of the health consequences of ETS.¹⁰ Smoking policies can be an effective means of reducing ETS exposure for non-smokers and smokers alike (Hammond K, Sorensen G, Youngstrom R, Ockene J. Passive

sampling of environmental tobacco smoke in 24 worksites. In preparation).

In addition, worksite smoking policies are beneficial for smokers. The evidence is mounting that worksite tobacco control policies contribute to reduced consumption of cigarettes among smokers,¹¹⁻¹⁷ increased quit attempts and success with quitting,^{11,12,14,15,17-19} and reduced rates of smoking initiation.^{16,17} The number of studies indicating such benefits seems to be accruing more rapidly than evidence to the contrary.²⁰⁻²⁴ Smoking policies may also provide support for maintenance of smoking cessation, although investigations of this effect are lacking.²⁵

Other studies have suggested that ordinances requiring worksites to adopt smoking policies are effective in increasing policy adoption. For example, in a survey of 793 worksites from 11 communities participating in the Community Intervention Trial for Smoking Cessation (COMMIT), worksites in areas that had ordinances about smoking in the workplace were more likely to have smoke-free or restrictive smoking policies.²⁶ Unfortunately, however, the presence of such ordinances does not guarantee adoption of restrictive smoking policies by all worksites. Pierce and his colleagues⁷ found that about 40 % of indoor workers employed in communities with a strong smoking policy ordinance had no policy or only a weak policy restricting smoking. Similarly, in their 1989 survey of businesses in a community that required that worksites have posted non-smoking policies, Rigotti *et al*²⁷ found that only 36 % of the worksites were even aware of the ordinance. Although 25 % of the firms with smoking policies cited the law as the reason for policy adoption, full compliance with the law was low. In requiring worksites to adopt smoking policies, most laws delegate implementation to public health departments, but fail to fund this activity.⁶ By viewing these laws as self-enforcing, an inappropriate assumption is often made that monitoring and surveillance are not needed.²⁸

As evidenced from the Pierce *et al* report⁷ on the California experience, comprehensive smoking legislation is needed to establish and support pervasive norms for smoke-free worksites. Although we must be cautious in drawing causal inferences from the Pierce *et al* study, these findings suggest that legislation can play an important role in reducing ETS exposure. While the presence of such legislation may be an indicator of existing public attitudes in support of tobacco control, these ordinances can also serve to institutionalise such norms and provide ongoing reinforcement of tobacco control.

These findings are of particular relevance in light of new legislation introduced recently in the US Congress. In November 1993, HR 3434, the Smoke-Free Environment

Act of 1993, was introduced in the House of Representatives by Congressman Henry Waxman (Chairman of the Subcommittee on Health and the Environment of the Committee of Energy and Commerce) and over 40 other members. Senator Frank Lautenberg introduced a companion bill (S 1680) in the US Senate. These bills would require that all nonresidential buildings regularly entered by 10 or more persons in the course of a week adopt a smoke-free environmental policy that either bans smoking inside the building or restricts smoking to separately ventilated and exhausted smoking rooms. The bills would effectively ban or restrict smoking in most indoor environments, including office buildings, schools and other educational establishments, theatres, restaurants, hotels, hospitals and other health care facilities, sports arenas, retail establishments, and manufacturing plants. Legislation of this kind is likely to encounter substantial opposition from the tobacco industry. Traynor and his colleagues²⁹ recently reported that in its efforts to defeat tobacco control legislation, the tobacco industry has moved from organising smokers and political campaign firms to defeat or weaken local ordinances, to using front groups to conceal its involvement and monitor local legislation efforts. Nonetheless, if passed, such legislation could have far-reaching effects in solidifying social norms supporting tobacco control, and in providing comprehensive protection against exposure to ETS.

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